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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,695	09/08/2006	Masaharu Udagawa	P30675	9058
52123 7590 04/10/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER CORRIELUS, JEAN B				
ART UNIT 2611		PAPER NUMBER		
NOTIFICATION DATE 04/10/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

### Office Action Summary

**Application No.**

10/598,695

**Applicant(s)**

UDAGAWA ET AL.

**Examiner**

Jean B. Corielus

**Art Unit**

2611

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1, 2 and 4 is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☒ Claim(s) 3 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08 September 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF-08)  
Paper No(s)/Mail Date 12/14/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because fig. 3, "303" should be replaced by "203", so as to be consistent with fig. 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities the specification at paragraph 0017 (bottom section) recites In the second operation mode, **the fixed supply voltage is supplied to the high frequency power amplifier** so that

the high frequency power amplifier operates as a linear amplifier, and amplitude modulation is performed by the variable gain amplification section according to the baseband amplitude modulation signal and the gain control signal (with emphasis added on the bolded text). This is not consistent with the first portion of paragraph 0017 that recites :Another aspect of the transmission apparatus of the present invention adopts a configuration further having a supply voltage supplying section that **selectively supplies a supply voltage according to** the baseband amplitude modulation signal and the gain control signal or **a predetermined fixed supply voltage to the high frequency power amplifier** according to first and second operation modes. (with emphasis added on the bolded text). In other words, the first section at paragraph 0017 recites that **selectively supplies a supply voltage according to a predetermined fixed supply voltage to the high frequency power amplifier** while the bottom section teaches that the **fixed supply voltage is supplied to the high frequency power amplifier. Note that similar comment applies to other section of the specification with similar text.** Appropriate correction is required.

#### ***Claim Objections***

3. Claim 3 is objected to because of the following informalities: claim 3, lines 16-22 recites in the second operation mode, **the fixed supply voltage is supplied to the high frequency power amplifier** so that the high frequency power amplifier operates as a linear amplifier, and amplitude modulation is performed by the variable gain amplification section according to the baseband amplitude modulation signal and the gain control signal (with emphasis added on the bolded text). This is not consistent with

the first portion of the claim that recites in lines 2-7 that "a supply voltage supplying section that **selectively supplies a supply voltage according to** the baseband amplitude modulation signal and the gain control signal or **a predetermined fixed supply voltage to the high frequency power amplifier** according to first and second operation modes". (with emphasis added on the bolded text). In other words, the claim recites in lines 2-7 that **selectively supplies a supply voltage according to a predetermined fixed supply voltage to the high frequency power amplifier** while in lines 16-22 it recites the **fixed supply voltage is supplied to the high frequency power amplifier**. In addition, the "supply voltage supplying section" is understood to correspond to element 103 of fig. 2. However, examiner notes that element 103 does not provide the supply voltage to the high frequency power amplifier 105. The supply voltage is shown to be provided to the amplitude modulation device 104. Please correct and or comment. Appropriate correction is required.

***Allowable Subject Matter***

4. Claims 1, 2 and 4 are allowed.
5. Claim 3 would be allowable if amended to overcome the objection set forth above.

***Conclusion***

6. This application is in condition for allowance except for the formal matters noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

7. The following is a statement of reasons for the indication of allowable subject matter: a radio communication apparatus is disclosed. The closest prior art, applicant's admitted prior art fig. 1 discloses similar method and apparatus. However, applicant admitted prior art does not teach or fairly suggest, in combination with the other claimed limitation, the limitations of " a linear-log conversion circuit that linear-log converts the baseband amplitude modulation signal; and a variable gain amplifier that amplifies the high frequency phase modulation signal based on the linear-log converted baseband amplitude modulation signal and a gain control signal".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/  
Primary Examiner  
Art Unit 2611